

BEST AVAILABLE COPY**PATENT****IBM Docket No. GB9-2000-0094 US1****Listing of Claims**

1 - 5 canceled

6.(currently amended) A method ~~according to claim 1, of managing communications between a set of communication managers and a remote communication manager~~, wherein the set of communication managers are a set of queue managers in a queue-sharing group, the method comprising:

starting a communication channel between a first communication manager of the set and the remote communication manager for transmitting data from a data storage repository to the remote communication manager, and the data storage repository accessible to any one of the set of communication managers is being a shared-access message queue from which any one of the set of queue managers can retrieve messages for transmission to remote queue managers;

storing state information for the communication channel in a storage repository accessible by any one of the set of communication managers;

storing state information for the communication channel in a storage repository accessible by any one of the set of communication managers; and

in response to a failure which affects the first communication manager, a second one of the set of communication managers using the stored channel state information to start a new channel instance and resuming transmission of data from the data storage repository to the remote communication manager via the new channel instance.

7.(currently amended) A method ~~according to claim 1, including of managing communications between a set of communication managers and a remote communication manager~~, the method comprising:

starting a communication channel between a first communication manager of the set and the remote communication manager for transmitting data from a data storage repository to the

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remote communication manager, the data storage repository being accessible by any one of the set of communication managers;

storing state information for the communication channel in a storage repository accessible by any one of the set of communication managers;

storing state information for the communication channel in a storage repository accessible by any one of the set of communication managers;

in response to a failure which affects the first communication manager, a second one of the set of communication managers using the stored channel state information to start a new channel instance and resuming transmission of data from the data storage repository to the remote communication manager via the new channel instance; and

storing synchronization information for data transmissions via said communication channel in a second storage repository accessible by any one of the set of communication managers; and

in response to said failure, one of said set of communication managers recovering said first communication manager's data transmissions to a consistent state using the stored synchronization information.

8. canceled

9. (currently amended) A data communication system ~~according to claim 8, including,~~ comprising:

a data storage repository accessible by any one of a set of communication managers;

a set of communication managers, each adapted to start an instance of a communication channel for transmitting data from the data storage repository to a remote communication manager, and each adapted to transmit data via said communication channel;

a storage repository for storing current state information for the communication channel, the storage repository being accessible by one one of the set of communication managers,

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wherein the set of communication managers are responsive to a failure affecting a first communication manager of said set which has a first active instance of a communication channel to start a second instance of the channel using the stored current channel state information and to resume transmission of data from the data storage repository to the remote communication manager via the second channel instance;

a storage repository for storing synchronization information for data transmissions via said communication channel, the storage repository being accessible by any one of a set of communication managers;

wherein the set of communication managers are responsive to a failure affecting a first communication manager of said set which has a first active instance of a communication channel, to recover said first communication manager's data transmissions to a consistent state using said stored synchronization information, thereby to enable transmission of data from the data storage repository to the remote communication manager to be resumed without loss of data.

10.(currently amended) A data communication system according to claim 9, wherein the set of communication managers are a set of queue managers in a queue-sharing group and the data storage repository accessible to any one of the set for storing synchronization information includes:

a shared-access message queue from which any one of the set of queue managers can retrieve messages for transmission to remote queue managers; and

a shared-access synchronization queue for storing said ~~synchronisation~~ synchronization information.

11. canceled

12.(currently amended) A data communications system comprising:

a data storage repository accessible by any one of a set of communication managers;

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a set of communication managers, each adapted to start an instance of a communication channel for transmitting data from the data storage repository to a remote communication manager, and each adapted to transmit data via said communication channel;

a storage repository for storing synchronization ~~synchronisation~~ information for data transmissions via said communication channel, the storage repository being accessible by any one of the set of communication managers;

wherein the set of communication managers are responsive to a failure affecting a first communication manager of said set which has a first active instance of a communication channel, to recover said first communication manager's data transmissions to a consistent state using said stored synchronization ~~synchronisation~~ information, thereby to enable transmission of data from the data storage repository to the remote communication manager to be resumed.

13.(original) A method of managing communications between a set of communication managers and a remote communication manager, the method comprising:

starting a first instance of a communication channel between a first communication manager of the set and the remote communication manager for receiving data from the remote communication manager;

preventing a second instance of the communication channel from being started while the first instance of the channel is in active use by the first communication manager;

in response to a channel start request from the remote communication manager following a failure which affects the first communication manager, starting a second instance of the channel between a second one of the set of communication managers and the remote communication manager and resuming data transmissions from the remote communication manager via the new channel instance.